

# **Regional HIV/AIDS Epidemiologic Profile of Metro West Health Service Region, Massachusetts: 2011**

## **Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data**

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed while residing in another state before being reported in Massachusetts. As of January 1, 2011, this resulted in the removal of 2,297 HIV/AIDS cases, of which 739 have died and 1,558 were living. These persons living with HIV/AIDS may currently reside and receive care in the Commonwealth. The total number of persons living in Massachusetts with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS surveillance system. The cases are assigned to the state that reports the earliest date of AIDS diagnosis, if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the Massachusetts Department of Public Health (MDPH) HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 41% of recent HIV diagnoses among females are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

**Table 1. Total number of people reported with HIV infection or AIDS<sup>1</sup> by mortality status on December 31, 2010: Metro West Health Service Region, Massachusetts<sup>2</sup>**

	<b>N</b>	<b>%</b>
People Living with HIV/AIDS	2,455	60%
People Reported with HIV or AIDS who are Deceased	1,632	40%
<b>Total Number of People Reported with HIV Infection or AIDS</b>	<b>4,087</b>	<b>100%</b>

<sup>1</sup> Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

<sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

**Table 2. Average annual rate of HIV infection diagnosis from 2007 to 2009 and HIV/AIDS prevalence rate on 12/31/10<sup>1</sup>: Metro West Health Service Region, Massachusetts<sup>2</sup>**

<b>Average annual HIV diagnosis rate from 2007–2009</b>	<b>Average rate per 100,000</b>	<b>Average annual number of HIV diagnoses</b>
Metro West Health Service Region, MA	6.9	103
Massachusetts Total	9.4	607.3
<b>HIV/AIDS prevalence rate on 12/31/10</b>	<b>Rate per 100,000</b>	<b>Number of people living with HIV/AIDS</b>
Metro West Health Service Region, MA	164.9	2,455
Massachusetts Total	273.7	17,621

<sup>1</sup> The denominators for prevalence calculations are based on year 2005 population estimates from the MDPH Bureau of Health Statistics, Research and Evaluation.

<sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

**Table 3. People living with HIV/AIDS<sup>1</sup>, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year<sup>2</sup>: 2000–2009, Metro West Health Service Region, Massachusetts<sup>3</sup>**

<b>Year</b>	<b>HIV/AIDS Prevalence</b>	<b>Deaths among those with HIV/AIDS</b>	<b>Diagnosis of HIV Infection</b>
2000	1,636	43	166
2001	1,705	53	122
2002	1,816	34	145
2003	1,906	46	136
2004	1,990	42	126
2005	2,094	32	136
2006	2,150	43	99
2007	2,227	28	105
2008	2,304	26	103
2009	2,376	29	101

<sup>1</sup> Number of people living with HIV/AIDS on 12/31 of each year

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

**Table 4. People diagnosed with HIV infection from 2007–2009<sup>1</sup> and people living with HIV/AIDS on December 31, 2010 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Metro West Health Service Region, Massachusetts<sup>2</sup>**

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	224	72%	1,761	72%
Female	85	28%	694	28%
Place of Birth:	N	%	N	%
US	168	54%	1,532	62%
Puerto Rico/US Dependency <sup>3</sup>	9	3%	81	3%
Non-US	132	43%	842	34%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	135	44%	1,245	51%
Black (non-Hispanic)	113	37%	832	34%
Hispanic/Latino	49	16%	313	13%
Other/Undetermined <sup>4</sup>	12	4%	65	3%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	128	41%	963	39%
Injection Drug Use (IDU)	14	5%	323	13%
MSM/IDU	12	4%	70	3%
Heterosexual Sex	39	13%	325	13%
Other	2	1%	65	3%
Total Undetermined	114	37%	709	29%
• Presumed Heterosexual Sex <sup>5</sup>	39	13%	257	10%
• Undetermined <sup>6</sup>	75	24%	452	18%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2010	
Under 13	2	1%	10	<1%
13 to 19	6	2%	27	1%
20 to 24	32	10%	48	2%
25 to 29	34	11%	86	4%
30 to 34	47	15%	146	6%
35 to 39	40	13%	259	11%
40 to 44	49	16%	430	18%
45 to 49	41	13%	540	22%
50 to 54	21	7%	424	17%
55 to 59	14	5%	238	10%
60+	23	7%	247	10%
<b>Total</b>	<b>309</b>	<b>100%</b>	<b>2,455</b>	<b>100%</b>

<sup>1</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

<sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>3</sup> Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

<sup>4</sup> Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity

<sup>5</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>6</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/11

**Table 5. People living with HIV/AIDS on December 31, 2010 by gender and race/ethnicity: Metro West Health Service Region, Massachusetts<sup>1</sup>**

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	1,045	59%	200	29%
Black (non-Hispanic)	423	24%	409	59%
Hispanic/Latino	236	13%	77	11%
Other/Undetermined <sup>2</sup>	57	3%	8	1%
<b>Total</b>	<b>1,761</b>	<b>100%</b>	<b>694</b>	<b>100%</b>

<sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

**Table 6. People living with HIV/AIDS on December 31, 2010 by gender and exposure mode: Metro West Health Service Region, Massachusetts<sup>1</sup>**

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	963	55%	N/A	N/A
Injection drug use (IDU)	194	11%	129	19%
MSM/IDU	70	4%	N/A	N/A
Heterosexual sex	101	6%	224	32%
Other	42	2%	23	3%
Total Undetermined	391	22%	318	46%
• Presumed heterosexual sex <sup>2</sup>	N/A	N/A	257	37%
• Undetermined <sup>3</sup>	391	22%	61	9%
<b>Total</b>	<b>1,761</b>	<b>100%</b>	<b>694</b>	<b>100%</b>

<sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>3</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

**Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Metro West Health Service Region, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>**

	Male		Female		Total
	N	%	N	%	
2000	113	68%	53	32%	166
2001	88	72%	34	28%	122
2002	90	62%	55	38%	145
2003	92	68%	44	32%	136
2004	92	73%	34	27%	126
2005	99	73%	37	27%	136
2006	71	72%	28	28%	99
2007	69	66%	36	34%	105
2008	75	73%	28	27%	103
2009	80	79%	21	21%	101

<sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

**Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Metro West Health Service Region, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>**

	White NH		Black NH		Hispanic/Latino		Other/ Undetermined <sup>3</sup>		Total
	N	%	N	%	N	%	N	%	
2000	78	47%	69	42%	18	11%	1	1%	166
2001	48	39%	48	39%	20	16%	6	5%	122
2002	59	41%	63	43%	16	11%	7	5%	145
2003	61	45%	52	38%	20	15%	3	2%	136
2004	65	52%	42	33%	14	11%	5	4%	126
2005	67	49%	48	35%	17	13%	4	3%	136
2006	47	47%	26	26%	21	21%	5	5%	99
2007	40	38%	45	43%	17	16%	3	3%	105
2008	46	45%	36	35%	16	16%	5	5%	103
2009	49	49%	32	32%	16	16%	4	4%	101

<sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

NH = Non-Hispanic

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

**Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Metro West Health Service Region, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>**

	US		Puerto Rico/ US Dependency <sup>3</sup>		Non-US		Total
	N	%	N	%	N	%	
2000	101	61%	8	5%	57	34%	166
2001	66	54%	6	5%	50	41%	122
2002	69	48%	2	1%	74	51%	145
2003	73	54%	1	1%	62	46%	136
2004	74	59%	5	4%	47	37%	126
2005	72	53%	0	0%	64	47%	136
2006	57	58%	4	4%	38	38%	99
2007	54	51%	2	2%	49	47%	105
2008	60	58%	3	3%	40	39%	103
2009	54	53%	4	4%	43	43%	101

<sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

**Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Metro West Health Service Region, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>**

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX <sup>3</sup>		Undeter- mined <sup>4</sup>		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2000	54	33%	20	12%	4	2%	30	18%	4	2%	26	16%	28	17%	166
2001	33	27%	13	11%	5	4%	25	20%	3	2%	13	11%	30	25%	122
2002	40	28%	14	10%	1	1%	27	19%	1	1%	27	19%	35	24%	145
2003	44	32%	12	9%	1	1%	14	10%	5	4%	28	21%	32	24%	136
2004	46	37%	11	9%	5	4%	19	15%	0	0%	14	11%	31	25%	126
2005	50	37%	11	8%	5	4%	17	13%	0	0%	15	11%	38	28%	136
2006	43	43%	16	16%	2	2%	13	13%	1	1%	9	9%	15	15%	99
2007	34	32%	7	7%	2	2%	16	15%	1	1%	15	14%	30	29%	105
2008	47	46%	4	4%	4	4%	14	14%	1	1%	11	11%	22	21%	103
2009	47	47%	3	3%	6	6%	9	9%	0	0%	13	13%	23	23%	101

<sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>4</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

**Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Metro West Health Service Region, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>**

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2000	64	166	39%
2001	50	122	41%
2002	55	145	38%
2003	47	136	35%
2004	41	126	33%
2005	54	136	40%
2006	35	99	35%
2007	44	105	42%
2008	31	103	30%
2009	31	101	31%

<sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.  
Data Source: MDPH HIV/AIDS Surveillance Program, data as of 1/1/11



**Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Metro West Health Service Region, Massachusetts,<sup>1</sup> 2007–2009<sup>2</sup>**

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
<b>Gender:</b>	<b>N</b>	<b>N</b>	<b>%</b>
Male	80	224	36%
Female	26	85	31%
<b>Race/Ethnicity:</b>	<b>N</b>	<b>N</b>	<b>%</b>
White (non-Hispanic)	41	135	30%
Black (non-Hispanic)	36	113	32%
Hispanic/Latino	27	49	55%
Other/Undetermined <sup>3</sup>	2	12	17%
<b>Place of Birth:</b>	<b>N</b>	<b>N</b>	<b>%</b>
US	49	168	29%
Puerto Rico/US Dependencies <sup>4</sup>	3	9	33%
Non-US	54	132	41%
<b>Total</b>	<b>106</b>	<b>309</b>	<b>34%</b>

<sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

<sup>4</sup> Ninety-nine percent of people diagnosed with HIV infection from 2007–2009 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands and <1% were born in Guam.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11